



## Stormwater Management Advisory Commission

### Meeting Minutes

April 4, 2019

3:00 pm

Conference Room 305  
Raleigh Municipal Building

**Commission Members Present:** David Markwood, Tappan Vickery, Claudia Graham, Mark Senior, Matthew Starr, and Evan Kane.

**Staff Members Present:** Wayne Miles, Suzette Mitchell, Kelly Daniel, Allison McGarity, Cameron Walbart, Heather Dutra, Amy Farinelli, Justin Harcum, Blair Hinkle, Carmela Teichman, Scott Bryant, and Kevin Boyer.

**Commission Members Absent:** Ken Carper, David Webb, Jonathan Page, and Francine Durso

**Guests:** James Kutzer, Brenna Harrell, Peter Raab, Jason Wright, Marsha Presnell Jeanette, and Remi Phillips.

**Meeting called to order:** 3:01 pm by Matthew Starr (*Chair*)

1. **Welcome, Introductions, Excused and Unexcused Absence**

- Mr. Senior made a motion to excuse David Webb, Ken Carper, Jonathan Page, and Francine Durso from today's meeting, and Ms. Vickery seconded. The motion was passed unanimously.

2. **March 4, 2019 Minutes for Approval**

- Mr. Kane made a motion to approve and Mr. Senior seconded. The motion was approved unanimously.

3. **Stormwater Staff Report** (*New hires*)

- *Sediment & Erosion Control Inspectors (Engineering Specialist)* — Cameron Waldbart
- *Stormwater Infrastructure (Senior Engineer)* – Barbara Moranta

**Hot Topics**

- ***Commission Membership Diversity Recommendations*** – All final edits have been accepted and the Commission will determine what to do with the recommendations.

***Motion:***

***Mr. Senior*** made a motion to approve the recommendations in whatever form is chosen and ***Mr. Kane*** seconded. The motion was approved unanimously.

- ***Update on Floodprone Area Stakeholder Group*** – Ben Brown received confirmation emails from proposed stakeholders on all but one member who has yet to confirm. The first meeting is scheduled for April 11 at 3:00 pm in the 8<sup>th</sup> floor conference room of One Exchange Plaza.



*The Commission and the public are welcome to attend. The meeting agenda consists of reviewing the history, the draft recommendation of SMAC, and the next meeting date.*

- **Update on failed pedestrian bridge across Pigeon House Branch** – Kevin Boyer stated the City has no authority under our stormwater rules; however, he referred it to the Housing and Neighborhoods Department as they have jurisdiction under the general nuisance ordinance. Housing and Neighborhoods has advised the owner to remove the debris. The owner has hired a contractor to remove the debris, which requires a crane and there are overhead power lines, which they are collaborating with Duke Energy on. The owner is interested in stabilizing the streambank while the contractor is there. The erosion is getting close to the paved area and referred them to NCDEQ.
- **Rain Barrel Program Quarterly Update** – There was a slight uptake in the winter months and we are anticipating more pick-up during the spring and summer months.
- **Summary of budget presentation to Raleigh City Council** – The budget was well received by Council. The primary question was related to the Green Stormwater Infrastructure (GSI) program and should we be more aggressive in implementing the program. A couple of suggestions were made: 1) should it be mandatory and 2) potentially look at other incentives.
  - **Ms. Vickery** asked if staff encouraged the fee increase in the budget as discussed in the last meeting. **Wayne Miles** pointed out they were unable to increase the fee but did inform them of an anticipated rate increase for next year. The fifty cents was mentioned, and it would be dependent on work being done now and next year to look at the programs we would like to expand (like streambank restoration), and the rate fee request may change depending on information we have between now and then. **Ms. Vickery** voiced concerns about the amount of infrastructure staff predicted failing in the next 5-10 years, and from personal experience the length of time it takes to get a culvert replaced. She indicated many people will be affected along with their private property and she feels Council needs to understand that.
- **Environmental Awards** – Carmela Teichman announced the award ceremony will be held today at 6:00 pm at City Market Hall (downtown).

#### 4. **Raleigh Rainwater Rewards Projects**

**Justin Harcum** (*Project Engineer*) provided a quarterly update of the program and then provided the one project that's up for review.

**212 E. Drewry Lane** - Install 1,155 square feet of permeable pavers on the property. It will treat runoff from a total of 2,305 square feet of impervious driveway and roof surface. This project is in the Crabtree Creek watershed and is eligible for a 75 percent reimbursement. The total cost estimate is \$13,775 with the petitioner's 25 percent share being \$3,444 and the City Stormwater share up to \$10,331.

#### **Questions/Comments**



**Mr. Kane** asked about the maintenance required for vacuuming the surface and is there a common available service for vacuuming. **Justin Harcum** replied there's permeable paver systems throughout the City's jurisdiction. We have a good maintenance list of contractors and the contractors have been vetted to be on there. If the property owner asked for a maintenance company, we can provide them with the same list as we provided the jurisdiction people. **Mr. Kane** said it's not an easily achievable thing to do so it would make the compliance with the maintenance agreement even tougher. **Justin Harcum** said they understand the difficulty of these types of systems, and staff is vocal in face-to-face interaction and onsite meetings stating the system is different than a rain garden.

**Ms. Graham** inquired about what the surface is being used for and how will you ensure that maintenance is being done annually. **Justin Harcum** said it's being used for a driveway and parking and they are required to submit an annual report to the City. Staff is in the process of revamping with forms and adding additional site visits.

**Ms. Vickery** said it was mentioned there are two of these projects since the policy changed in 2015, she wanted to know if they have maintained the maintenance agreement and kept the system working. **Justin Harcum** said yes, and that Shelley Road was just paid out a couple months ago and Talbert Court is complete.

**Motion:**

**Mr. Senior** made a motion to approve the project and both **Mr. Kane** and **Mr. Markwood** seconded. The motion was approved unanimously.

**Mr. Starr** thanked Justin on his work on the Pigeon House Branch Bridge.

**5. Update on Implementation of GI/LID (aka GSI) Work Plan**

**Kevin Boyer** updated the Commission on the GSI program formerly called Green Infrastructure/Low Impact Development (GI/LID). Today's topics include the meaning of the terms, the timeline, the workplan, and other GSI-related activities.

**Mr. Starr** remarked that GSI is not designed to capture large storm events; however, it does help with reducing flooding due to infiltration. He acknowledges that GSI has a positive correlation with reducing flooding during heavy flow events. He wants the City to look at requiring GSI on properties (like Wake County Public Schools). We would need to try and figure out the maintenance agreement that will come from that since we would be taking over their stormwater control measures (SCMs).

**Ms. Vickery** agreed. Her question is on the requirements in the watershed and the nutrient impact. She asked, if you have the best laid plans and the runoff is dangerous for water quality, what is the procedure and protocol for addressing that. **Kevin Boyer** said the GSI devices have the same requirements for inspections and is signed off annually by a licensed professional as any other SCM. **Ms. Vickery** said it doesn't sound like there is an acute need when there is a problem and it doesn't appear to address a failing system other than an annual inspection. **Kevin Boyer** indicated the way GSI or SCM programs are handled is that for the GSI or SCM to get into the manual as an acceptable practice. He stated there's criteria for them being designed, constructed, and maintained, and if all is done and inspected then it's presumed to be functioning correctly.



**Ms. Vickery** said that's her issue, presumption vs. implementation two and three years down the road. **Kevin Boyer** said it's based on inspection and the presumption is if it all checks out by inspection then it's functioning properly. **Wayne Miles** added that we don't just rely on inspections, but we also have outreach for educating those that are involved in the operational maintenance of these devices. **Mr. Senior** added they not only required self-inspection, but staff goes out and inspects to see if it's working or not and takes the necessary steps to get them under compliance.

**Mr. Starr** states he understands the concern around failure, but he's perplexed with the volume that will exist in a few years. He's hoping there will be many devices throughout the city and if one is failing or not, it will heavily rely on inspection and education. He thinks it would be difficult to work in a mechanism about the failure of those. **Ms. Vickery** says it concerns her more in the watershed and having a back-up plan or making sure people are thinking about it is a worthwhile situation.

**Kevin Boyer** said there might be some perception that GSI is experimental and not proven. It's business as usual in many cities across the country and has been vetted, so there's no reason to expect a failure rate. The challenge is getting a few on the ground and proving effectiveness over liability.

**Blair Hinkle** added not only do we want to ensure these devices work like any other SCMs, but we are required to do so per the NPDES permit in nutrient sensitive waters. We are under obligation to ensure the device is operational and GSI is not experimental, it is a proven practice where failure rate should not be higher than standard SCMs. There are inspections by City staff as well as annual reporting to ensure devices are functioning. In addition, the Division provides outreach such as the recent "Managing Your SCMs Workshop" to ensure proper maintenance.

**Ms. Graham** said she likes the GSI fact sheets and sees that Council and staff are committed to it. She sees there's opportunities in new development and established areas as well. She wanted to know, will the majority be covered under the Rainwater Rewards Program and how can this be spread throughout the city. **Kevin Boyer** said yes, most of the Rainwater projects fall under the definition of GSI and the public can learn through workshops, social media, website, mailings, public meetings, etc.

**Wayne Miles** said one of the challenges, yet biggest opportunities, is redevelopment of highly impervious areas. Staff wants to work to incentivize use of GSI and removal of impervious areas as part of a redevelopment project. He said express review is one area and another is our stormwater fees that are based on impervious area. If they are reducing impervious area on their property their fees will go down.

**Kevin Boyer** added that we are working with incentives rather than requirements for legal restrictions from state statutes for what we can require for development. The existing impervious area is grandfathered in and not subject to stormwater treatment requirements. **Wayne Miles** said another is the crediting program that Kelly Daniel will be speaking on next.

**Mr. Starr** said he would like the City to look at possible policy changes that would need to happen to require LID not as an entirety, but to subdivide it out, and see where some of the easiest avenues for that requirement may exist.



**Mr. Kane** pointed that he's not in opposition to GSI or their retrofits, but when you are looking at the whole menu of options for protecting water quality, open space preservation is the cheapest way too preserve water quality.

**6. Update on Revisions to the Stormwater Utility Fee Crediting Policy**

Kelly Daniel indicated his presentation is a follow-up to the February meeting, in which the Commission requested additional information. Staff recommended the following list of proposals:

- **Proposed Changes to Credits and Credit Limits.**

**Recommendation:** Staff recommends the proposed changes to expand potential crediting opportunities to promote increased participation in the crediting program.

- **Clarification from the Commission for how credits should be awarded for going above and beyond development or regulatory requirements.**

**Recommendation:** Staff recommends all development that provides a level of control beyond regulatory requirements receive the full credit listed as a means of encouraging enhanced participation.

- **Enhanced Credits for Priority Water Quality Target Areas.**

**Recommendation:** Staff recommends doubling qualifying water quality/pollutant control credits for properties that are located within a Priority Water Quality Target Area.

- **Simplified Crediting Framework for Water Quality/Pollutant Control Credits**

**Recommendation:** Base the water quality/pollutant control credit upon the percentage of annual pollutant load captured on site instead of relying upon SCM performance data that may be updated over time. SCM performance information would draw from the most up-to-date information available at the time of the crediting application.

**Questions/Comments**

- **Commission asked, what do you mean when you say, “pollutant load”, does it mean nitrogen or solids, etc.?**

*Staff said they used total nitrogen as the indicator.*

- **Commission asked, how much of a challenge will it be to maintain the program with more than the current 90 commercial properties?**

*Staff said with the new structure more people would be eligible. The key is promoting and if you don't you will not have a lot of participation. The more we promote the more people may apply for credits. We are not overly concerned with staffing with the current proposed changes, but in the future the concern is on the single-family credits side, which will generate a lot of staff time.*



- **Commission asked, how will this impact the relationship with NCSU?**

*Staff said any options the Commission recommends will need Council approval. A couple of questions are can they be grandfathered in with the credits they already have, or will they have to apply for the new program. Kelly Daniel believes there is an agreement that went to Council for approving the credits NCSU receives and he believes Council is the only one that can override that agreement.*

**Motion:**

**Mr. Starr** made a motion to approve the new credits draft, along with giving the full credit, not the difference, and approve doubling the water quality credits as staff laid out and **Mr. Markwood** seconded. The motion was passed unanimously.

**Mr. Starr** requested staff look at the agreement NCSU has with Council to see if it can be amended to bring them into this new program.

**7. Public Comment**

**Marsha Presnell Jeanette** (Parks and Recreation Greenway Advisory Board) remarked that she appreciated being present for Kevin Boyer's GSI presentation and how she is passionate about trees. At their next Parks Board Advisory meeting, they are discussing a workplan, and the initiative she's putting forward is a tree planting incentive. She wonders if SMAC would be interested in partnering with the Parks Board to encourage the City to do some tree planting incentives (tree giveaway). She's concerned about losing the big canopy trees and the oak trees, which is not good for the City of Oaks. She thinks we have a big responsibility for generations to come that we have a green city and it might be useful for SMAC to champion the planting of trees. She likes the idea of school outreach. She is also aware that Stormwater and Parks are already partnering on things and she likes to see more education inspiration ideas from Park on how we treat water and how we manage stormwater runoff.

**8. Other Business**

*No other business*

**Adjournment:**

**Mr. Senior** made a motion to adjourn and **Mr. Kane** seconded. The motion was passed unanimously, and the meeting adjourned at 5:07 pm.

Suzette Mitchell